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Talent Analytics from a Strategic Perspective

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Abstract:

This paper attempts to establish the alignment between strategic plans of the organization to the manpower planning specifically focused to sourcing, recruiting and also aspects pertaining to attrition. The concept of Talent Analytics has been analyzed, emphasizing on the methodologies and initiatives which need to be incorporated for the purpose of managing and selecting a workforce. It sheds light on the facet of HR analytics & Big data for structured and un-structured data and how its usage clubbed with the talent analytic processes can be a boon for the dynamic nature of business and how it provides a base for the success of tomorrow. It further discusses about usage of modern tools like balanced scorecard and industry benchmarking to derive correlations to the process of recruitment and selection, which has been objectively viewed as the inception point of the man power. It also discusses the key challenges, shortcomings and possible recommendations based on research that can help the organization enter a domain of evidence based strategic talent management mode. Careful consideration has also been laid upon the return of investment and cost-benefit factors which will directly affect both the top-line & bottom-line businesses.

Keywords: Talent Analytics, Recruitment ROI, Sourcing, Competency modelling, Big data

1. Introduction

The Doctrinal shift in global business from product focus orientation to customer focus has made organizations turn their internal working methodology towards a more talent focussed zone. The reason is simple – to meet the expectations of the customers and be able to view the purchasing process from a customer’s perspective, requires a certain competency not only in the frontline sales & marketing but in every sphere and vertical of the organization. [1] This requirement cannot be a subtle undertone of the organizational values, but has to become a part of the corporate vision & mission and then systematically trickle down to various SBUs, departments and finally at individual job levels. The question at hand is acquiring a pool of talent which is competent and aligned with the company objectives and how to ensure that the same is sustained over a given timeline. The critical issues which stem out of this are the strategic initiatives and both short term & long term planning needed at the apex level, how those plans can be converted to actionable outputs in the fields of selection and recruitment and how effectively can the entire process be monitored, recorded, analysed and presented in a quantitative manner to effectuate evidence based decision making process. Strategic Human Resource Management is basically aligning the business objectives of the organization to the Human capital to ensure an integrated approach in achieving these core results. The fundamental approach of integrating strategic planning to recruitment & selection via HR analytics and further ensuring the honing and development of the talent acquired to feed the pipeline of succession within the organization through training, feedback, adequate performance based compensation and other intangible initiatives mark the general outline of Strategic Talent Management via HR analytics.



Figure 1: Multi-faceted dimensions of Talent Analytics with strategic outline

2. Significance of HR Analytics & Big Data

The requirement for Human Resources to be viewed as a strategic collaborative partner affecting the outcome of the business, hinges upon the direct impact it can cause to the top-line and bottom line profit. The core HR operations are not supported by structured data, fact or evidence. It is intangible in nature and quantifiable comparison is amiss. Statistics show that more than 60% of the variable cost to the company is solely 'people cost', which depicts the seriousness of taking strategic decisions related to people management-decisions that hinge on concrete data, facts, algorithms; as opposed to baseless hypothesis that stem from gut feeling. Decisions related to Human Resources are still predicated upon factors like trust, relationships- which are vague and inconsistent with the needs of an Organization. Furthermore, factors like relationships are the antithesis of Analytical Decision making and a devoid of the facts that enable sound results. [2]

To cover this entire gamut of strategic requirements, the focus should be shifted from the conventional modulus operandi to HR analytics and Big data. Analytics covers the entire spectrum of data generation, storage, and conversion by analytics of the raw data into useful information.

Not using such a system, may create a void in the conventional operating procedures and value added logical data might not surface. For e.g. a 2013 survey by talent analytics software vendor SHL, more than three-quarters (77%) of HR professionals are unable to determine how their enterprises' workforce potential is affecting the bottom line, while less than half (44%) use objective data regarding talent performance to guide business decisions.

HR analytics is Process Analytics at the grass root level, incorporating key metrics pertaining to areas of operation within HR. Verticals that are process driven and find ease of functionality using analytics are Selection, Performance Management System, Competency Development, Training & Development, 360 degree feedback process, employee engagement et al.

3. Critical Aspects of Talent management via Analytics

Although Talent Management engulfs the entire life cycle process of an employee from entry to exit which involves training, succession planning, compensation et al. The focus here has been laid on three critical components namely Sourcing, Recruitment & Attrition for the purpose of mapping the important aspects associated with them.

3.1. Sourcing

HR has embraced the concept of Talent Analytics, with the core focus moving from transnational to strategic functions. Big Data enables the Organizations to co-relate their workforce planning efforts to Talent Acquisition methodologies. Organizations that have failed to implement these technology enabled Analytical systems would continue to find themselves frantically scrambling to fill in vital positions across the Organization structure. Leveraging Big Data and the related Quantitative approaches is a key enabler in driving talent acquisition strategies in an efficient and cost-effective manner. At a strategic level, the process of sourcing can be driven forth by talent mining- which has the capacity to transform Human Capital data into informational and competitive advantage. These methodologies can analyze data for talent discovery, identification of required personnel and acquisition. The next Frontier in implementation of Talent Acquisition strategies related to sourcing would require the building of data warehouses and usage of Business Intelligence solutions that can enable fact based decisions. Talent Mining hinges on the process of Information Retrieval- the science of searching relational databases and the internet. The queries being generated by the HR Department needs to focus the individual needs of the organization. Talent Mining has the capacity to a higher degree of predictive control over critical candidate variables than any other sourcing methodology. The emergence of shallow and unstructured data can result in less predictive control over the matching of critical variables. [3]

Business Intelligence in itself has the capacity to enhance the process of Sourcing by discovering, identifying and analyzing the internal data to gain a certain insight and enable better decision making. This requires access to specialized and centralized repository data which is designed to facilitate reporting and implementation of analytics.

3.2. Recruitment

This is the point of inception of the talent force into the organization. It has to be handled systematically incorporating the best practices established in the industry. It needs to pay close attention to the various costs that are being incurred and simultaneously

should have a justification for the same which can be highlighted by the short and long term advantages of the benefits that the organization is expecting over a period of time both in terms of tangible monetary contribution and other intangible factors like contribution to the organizational culture and value addition to the knowledge base.

- **Compliance process-** After initial manpower requirement mapping and internal creation of posts which are then made available, the focus has to then be laid upon the facets of generating a candidate pool by mapping the role-set competencies to the various features of the resumes obtained. This is the aspect of response management where careful filtering and scrutiny has to be implemented to ensure the selection of the right pool and also the response time has to be shortened by pro-actively engaging with the aspirant pool.
 - **Screening & Assessment –** This is the process of further scrutiny of the filtered pool to ensure the final selection into the talent pool of the company. This stage can be considered the most expensive, time consuming and also requiring the best resources of the company. This facet is gradually going to decide the quality of hire. The further breakdowns of the component include short listing, testing, interview, background check et al.[4]
- Competency model assessment – This is a component of assessment which needs to be incorporated in every organization, to ensure the selection of people who can probably have a superior performance based on the skills and behavioural.

Job analysis and Competency Model development	Competency assessment of job aspirants
<ul style="list-style-type: none"> • Identification of key activities of the role in question. • Identification of Knowledge, skills, attitudes and other abilities for performing these tasks • Clustering KSAOs under Key Result Areas • Identification of competencies e.g. good communication skill, strong analytical capability (for a marketing role) etc. • Identification of behaviours which can bear direct correlation to these identified competencies 	<ul style="list-style-type: none"> • Use of multiple assessors and various simulations which will bring forth the underlying competencies • Integrated rating to remove bias and collaborative selection • Identification of key behaviour in actual job-like simulated situation • Incorporation of methodologies like Behavioural Event Interviews and use of formal Assessment centres.

Figure 2: Competency modelling facets

- **Hiring & On-boarding –** This is the final phase of the core recruiting process and involves extending the offer to the selected candidate, recording the acceptance ration from various sources for analysis, on-boarding and verification and enrolment of the employees in the HRIS portals.

3.3. Attrition

More and more HR managers are turning to big data to not only find the right people for the right positions but also for coping up with high attrition rates.

- It is no secret that underperforming employees hinder monetary results, but the cost associated with replacing a worker can far outweigh the cost of what an employee is being paid. Talent Analytics' predictive model shows that "one 'hire' wipes out the value of three great hires". Globally, it is estimated that employee turnover will rise sharply in 2014, with an estimated 161.7 million workers leaving their current positions for new employment. Traditionally, attrition is reported from the last year or over a period of time, but this practice gives little insights for problem solving including how to predict who will leave or how to hire people who will stay. To predict this, companies can pull a multitude of different metrics, including attendance records, efficiencies, KPI (key performance indicator) adherence, among other trends, to find patterns of behaviour in employees who left.
- One of the pioneer industries, which apply these measures for attrition, is call centre industry. Leading example of a company using big data to reduce attrition is Xerox. Xerox implemented big data with an aim to recover \$ 5,000 (amount spent on hiring and training of employee) worth of work from every employee, before they leave. After the initial trial period of six months, the company was able to reduce its attrition rate by 20%. [5] This was done mainly by identifying people with right skills for each job and thus reducing attrition. Traditionally, HR managers rely on interviews and past experience, but it has proved to be ineffective for call centre industry. To counter this ineffectiveness, personality tests and data analysis were used to predict specific outcomes such as whether a prospective hire will quit the company or whether an employee would steal information. [6]
- There are many big IT players who provide talent management software along with whole gamut of services including change management for implementation. IBM is a leading player in this arena, providing various services and software modules including data that gives business leaders access to workforce analytics and behavioral assessments to understand

individual, job, team and organizational traits that define top performers. It will enable clients to assess current workforce readiness to address existing and emerging business demands. It also helps companies in guarding against future talent attrition by helping organizations compile and analyze high-volume workforce data – from exit interviews to real-time SaaS-based employee analysis – to understand risk factors, identify employees likely to leave and build new programs to reduce the risk of attrition. [7]

4. Modern Tools for Sourcing & Recruitment – Millennial tools

- Applicant tracking systems (ATS) This tool emerged as the first piece in recruitment technology in 1990s. Initially, systems were only used for tracking CVs but over the years many other functionalities like skills-matching, CV parsing and job posting to multiple channels, including social media have been added. Today, ATSs are more like “integration platforms” that connect to all the tools and services used in sourcing and recruitment process. One of them is TribePad, which describes itself as a “social” ATS and whose users can advertise their jobs anywhere on the web. It features intelligent skills-matching based on semantic technology and provides built-in real-time analytics to evaluate what channels perform best. [8]
- Mobile recruiting- One of the most upcoming ones is the advent of the mobile recruiting tools and platforms that have started to come up. Research suggests that 2.8 million job seekers already access job listings through mobile devices a month through mobile devices in the UK. Mobile recruiting tools can be divided into four main categories, namely: QR (quick response) codes, text alerts, apps and mobile-optimized websites.
- Gamification- Another area that is expected change the way recruiting happens is through gamification. Gamification delivers considerable efficiencies both as an attraction, engagement tool and also a route to find and identify people having correct skills for a particular role. It is also used to connect and forge strong relationships with the talent pool. There is an increasing market of gamification developers, such as Connect Cubed, which builds assessment games that could be used on candidates in a talent pool, while Peoplefluent has an app to increase the engagement of managers in its talent management software.
- Social Sourcing- Social sourcing through LinkedIn has heavily picked up, with huge number of recruiter licenses being procured. Although it has become a point of parity and no longer a point of differentiation, recruiters still rely heavily on it for head hunting. Interesting tools include Entelo, Gild which mine your personal code postings and other social information to create a profile and actual “competency ratings” for said user profiles [9]
- Video interviewing- Now a days, it is a widely used technology which has helped company’s save huge amounts of money. The added aspect of video interviewing is that it can pick up subtle emotional cues and the body language, which can later be observed, studied and used as an added dimension of information to evaluate the candidates

5. ROI & Cost-benefit Analysis using HR metrics

Computing ROI and CBA, is essential for the strategic management to fine-tune the process such that the sources of costs are tapped and at the same time the focus is on “cost-reduction”. The aim is to find a ratio, which will demonstrate the sum of all costs incurred in the process of recruiting, which can again be represented separately to zero-in on the problems. Also, the sum of benefits received by the company would be the direct evaluation of effective performances and value addition by the employees hired.

ROI = Net Income / Book Value of Asset
(Traditional ROI Formula)

(This formula can be tweaked for the
recruitment process as)

ROI = Sum of benefits received / Costs
incurred in hiring process

5.1. Sum of benefits Received by the company

- The monetary value of targets met and whether those targets are as per plan
- The Cost reduction contribution per employee in his/her own field
- Direct conversion of Man-hours invested to monetary figures to show benefits

5.2. Total costs incurred by the company for recruiting:

- HR metrics showing cost per hire as a whole
- Cost incurred in job postings, advertisements and sourcing of channels
- Wages of administrators conducting Interviews and their travel plus lodging allowances
- Cost incurred in testing applicant CVs and background checks
- Cost of On-boarding and orientation costs associated with recruiting

If the ratio generated is less than one (<1), implies more costs and then the various factors enumerated in the above table should be focussed upon to identify the crux of the problem [10]

5.3. Major HR analytics metrics

Which further need to be objectively created and monitored for evaluating the progress and aiding in the computation of ROI and CAB are as illustrated:

- Time to Hire - how much time passes before the successful candidate starts. Not just before they accept your offer, but until they are actually on board
- Sourcing Channel - multiple channels from which to source your potential candidates and How many applicants came from each source
- Cost of Hire - Sum of all costs including social media platforms, consultant fee, travelling and utilities
- Retention metrics - are best looked at from a cross-sectioned perspective. What is the turnover rate for a specific role etc. Compare that to the turnover rate across specific departments
- Open Vacancies vs. Positions Filled - Number of vacancies the organisation has vs. the number of vacancies that have been filled recently

6. Challenges for Talent Analytics

Development of Talent Analytics can be marred by a series of issues. The data that is needed to implement Talent Analytics has to be systematic, reliable and defined.

- Silos: With a variety of data being used within the Organization (viz. data related to people, programs, performance, et al), it becomes difficult to access this data that has become diffused, hence bringing the concept of Silos to the surface. Structural Silos refer to the structural barriers that exist between HR functions and the respective performance operations.

[11]

The emergence of Cloud Computing, active sharing of data across various verticals, outsourcing various business process, increasing incidents related to hacking and breaching of firewalls, etc has lead to concerns regarding data security- which creates silos of its own. Implementation of Talent Analytics needs robust but permissive security, as limited access would eventually become a hindrance in procuring valuable insight.

- Lack of Skills: Most HR Professionals lack the required training in data and analytics. This discomfort with quantitative methodologies might lead them to develop a bias towards qualitative approaches. Also, Talent Analytics has developed as a means to solve complex Business Challenges, where most HR personnel still resort to relying on their intuition and inductive reasoning. This can be dealt with narrowing down onto skilled professionals that show flair at spreadsheets, databases, coding queries, number crunching, etc and developing their analytical abilities to ensure that they can conduct good quality data analytics and sift out actionable insights. If such individuals aren't present within the organization, one should consider hiring 'Data Scientists' who are well versed in the field of Analytics.
- Volume: The sheer volume of data has been expanding at an unprecedented pace, and is now available on numerous channels and devices. With the voluminous data that is transiting across systems, the units of measurement have become mind boggling. It can be argued that the volume of the data isn't the only hindrance; the nature of data also predicates which analytical methodologies can be implemented on the same- which adds the fourth 'V' to Gartner's three V's of Big Data- Volume, Velocity, Variety and Value.[12]

7. Recommendations for effective Strategic Talent Analytics

- Cost reduction by zeroing-in on the high cost attributes and then taking adequate steps for its reduction. This will need quantitative data and the corrective measures will directly affect the bottom-line profit
- Identification of metrics and analysis methods which are pertinent to the business goals and actually needed by the organization, rather than adhering to standardized benchmarked metrics. The situation where managers are being overflowed by data can be detrimental to the decision making process.
- Ensuring a clear bifurcation between the business process – logic part and the core analytics physical part. HR analytics is only a tool which will aid the main process and should not be used for the sake of advancing technology.
- A thorough Gap analysis of the process and physical analytics setup we want to establish with 3 major perspectives of where we are, where we want to go and how to reach the goal.
- Ensuring that HRIS (Human Resource Integrated System), is not a standalone methodology but embedded and integrated with the regular main stream functionalities and operations of the organization.[13]
- Creating a conducive work environment for employees to reduce turnover rate. This can include various initiatives like:
 - Focussed training specific to the requirement of the individual depending on the role set
 - Establishing clarity of role and providing a holistic perspective of the significance of the job
 - Engaging employees for succession planning so that they are able to map their career progression
 - Adequate compensation which is as per industry standards and also performance based, which again needs to be mathematically measured and acted upon[14]

8. Conclusion

The entire essence of Talent analytics can be comprehensively viewed as an attempt to source, select, engage and retain a talent pool which will lead the organization to the achievement of its established goals. This will require proper planning at the apex corporate

level and needs the complete cooperation of the higher management. It has to be evidence based, so that the investment is justified and also critical decisions are based on hard facts and numbers. It will have to be incorporated in the core culture and the competency of the organization and given a proper gestation period, will yield results to provide the organization with a sustainable competitive advantage.

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